

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended)

a digital image shooting device comprising:

an image forming lens;

an image sensor element;

a data processing unit for processing an output signal from said image sensor element into digital image data;

an image memory for storing the digital image data and a lens characteristic relating to the image forming lens; and

a lens characteristic correction unit for performing, by using the stored lens characteristic of said image forming lens and a position of a frame image photographed, a process of correcting a deterioration of an image quality derived from said image forming lens upon the ~~entire~~ digital image data, to obtain processed image data, before a ~~the~~ shooting of a next frame of an image, in which the processed image data is stored in said image memory prior to the shooting of the next frame, or during the shooting of the next frame onward, in which the processed image data is stored in said image memory during or after the shooting of the next frame;

~~wherein said image quality deterioration corrected by said lens characteristic correction unit is at least one of a chromatic aberration of magnification, defocusing and a decrease in marginal lumination.~~

Claim 2. (Previously Presented)

The digital image shooting device according to claim 1 wherein said image quality deterioration further includes a distortion aberration.

Claim 3. (Previously Presented)

A digital image shooting device according to claim 1, wherein said lens characteristic correction unit corrects the deterioration of the image quality before a process of compressing the digital image data.

Claim 4. (Previously Presented)

A digital image shooting device according to claim 1, wherein said lens characteristic correction unit performs the correction before the photographing of a next frame or during the photographing of the next frame onward, wherein the digital image data of the frame which is performed, and the correction by the lens characteristic correction unit are stored in said image memory.

Claim 5. (Previously Presented)

A digital image shooting device according to claim 1, wherein said image memory is a built-in image recording medium or a removable image recording medium.

Claim 6. (Previously Presented)

A digital image shooting device according to claim 1, further comprising an

image display unit for displaying the photographed image,

wherein an image based on the digital image data which is or is not performed the correction process in said lens characteristic correction unit, is displayed on said image display unit, and the digital image data performed the correction process in said lens characteristic correction unit, is stored in a memory.

Claim 7. (Previously Presented)

A digital image shooting device according to claim 1, wherein an image of a region larger than a photographic region confirmed by a photographer is formed on said image sensor element in accordance with missing of pixels which is caused as a result of the correction by said lens characteristic correction unit.

Claim 8. (Previously Presented)

The digital image shooting device according to claim 1, wherein said image forming lens comprises a plurality of lens and said image memory stores a plurality of lens characteristics pertaining thereto.

Claim 9. (Currently Amended)

The A digital image shooting device of claim 1, comprising:

~~an image forming zoom lens;~~

~~an image sensor element;~~

~~a data processing unit for processing an output signal from said image sensor element into digital image data;~~

~~an image memory for storing the digital image data and a wherein the lens is a zoom lens and the lens characteristic relating relates to a plurality of focal lengths of the zoom lens; and~~

~~a lens characteristic correction unit for performing, by using the stored lens characteristic of said image forming lens and a position of a frame image photographed, a process of correcting a deterioration of an image quality derived from said image forming lens upon the entire digital image data, to obtain processed image data, before a the shooting of a next frame of an image, in which the processed image data is stored in said image memory prior to the shooting of the next frame, or during the shooting of the next frame onward, in which the processed image data is stored in said image memory during or after the shooting of the next frame,~~

~~wherein the lens characteristic is converted at the plurality of focal lengths to the focal length when the image is photographed.~~

Claim 10. (Currently Amended)

A digital image shooting device comprising:

an image forming lens;

an image sensor element optically coupled to said lens;

a data processing unit ~~operatively~~ connected to said image sensor and receiving an output signal from said image sensor element and converting the output signal into digital image data;

an image memory ~~operatively~~ connected to said data processing unit, the digital image data and a lens characteristic relating to the image forming lens being stored in said image memory; and

a lens characteristic correction unit ~~operatively~~ connected to said image memory, said lens characteristic correction unit correcting a deterioration of an image quality derived from said image forming lens upon the digital image data, to obtain processed image data, by using the stored lens characteristic of said image forming lens and a position of a frame image photographed before a ~~the~~ shooting of a next frame of an image, in which the processed image data is stored in said image memory prior to the shooting of the next frame, or during the shooting of the next frame onward, in which the processed image data is stored in said image memory during or after the shooting of the next frame,

wherein the image quality deterioration corrected by the lens characteristic correction unit is a distortion aberration and a chromatic aberration of magnification.

Claim 11. (New)

The digital image shooting device of claim 1, wherein said image quality deterioration corrected by said lens characteristic correction unit is at least one of

a chromatic aberration of magnification, defocusing and a decrease in marginal lumination.

Claim 12. (New)

The digital image shooting device according to claim 1, wherein the digital image data comprises three primary color-based image data, and

wherein the lens characteristic correction unit calculates a first deviation quantity of a first color-based image data due to the deterioration of the image quality, the first color-based image data selected among the three primary color-based image data, and calculates second deviation quantities of two color-based image data other than the first color-based image data on a basis of the calculated first deviation quantity, the second deviation quantities representing relative quantities to the first deviation quantities, and performs the process of correcting the deterioration of the image quality using the first deviation quantity and the second deviation quantities.

Claim 13. (New)

The digital image shooting device according to claim 12, wherein the deterioration of the image quality comprises a distortion aberration and a chromatic aberration and,

the first deviation quantity is a deviation quantity due to the distortion aberration and the second deviation quantities are deviation quantities due to both the distortion aberration and the chromatic aberration.